

LIMITING CONDITION FOR OPERATIONSURVEILLANCE REQUIREMENT

- b. From and after the date that one of the two 125 volt station battery systems is made or found to be inoperable for any reason, reactor operation may continue for three days provided Specification 3.5.G is met, and repair is immediately initiated.
- c. From and after the date that the 250 volt station battery system is made or found to be inoperable for any reason, the HPCI system shall be considered to be inoperable and the requirements of Specification 3.5.D shall be met.
- d. From and after the date that one or more of the +/-24 volt station batteries are made or found to be inoperable, continued reactor power operation is permissible provided the requirements of Table 3.2-C, Table 3.2-D, and Technical Specification 3.2.D.1 are met.

3. Offsite Power

- a. From and after the date that the startup or standby transformer and one diesel-generator or associated buses are made or found to be inoperable for any reason, reactor operation may continue provided the requirements of Specification 3.5.G.1 are satisfied.

3. Offsite Power

- a. When it is determined that one of the diesel-generators or associated buses is inoperable, the requirements of Specification 4.5.G.1 shall be satisfied.

LIMITING CONDITION FOR OPERATION

- b. From and after the date that both the startup and standby transformers become inoperable, reactor operation may continue for seven days provided both emergency diesel-generators, associated buses and all low pressure cooling systems are operable.

SURVEILLANCE REQUIREMENT

- b. When it is determined that both the startup and standby transformers are inoperable both diesel-generators, associated buses and all low pressure core and containment cooling systems shall be demonstrated to be operable immediately and daily thereafter.

The minimum diesel fuel supply of 35,000 gallons will supply one diesel-generator for a minimum of seven days of operation satisfying the load requirements for the operation of the safeguards equipment. Additional fuel can be obtained and delivered to the site from nearby sources within the seven day period.

A battery charger is supplied with each of the two 125 volt d-c main station batteries. In addition, a spare charger is available and can supply power to either battery system. Since this alternative source is available, one battery charger can be allowed out of service for maintenance and repairs. Similarly, one of the two battery chargers provided for the 250 volt d-c station battery can be allowed out of service for maintenance and repairs.

A battery charger is supplied with each of the four 24 volt d-c station battery systems. The two sets of 48 volt batteries and chargers provide two +/- 24 volt station battery systems for radiation monitoring systems. The two +/-24 volt station battery systems are divisionalized and redundant, with each having its own set of batteries, battery chargers, and a distribution panel. Separation is provided for all equipment and feeders as in all other safeguards systems.

2. Adequate power is available to operate all emergency safeguards equipment from either the startup transformer or the standby transformer. In addition, each of the diesel-generator units is capable of supplying 100 percent of the emergency loads required under postulated design basis accident conditions. Each unit is physically and electrically independent of the other and of any offsite power source. One diesel-generator

can be allowed out of service for a period of seven days without jeopardizing the safety of the station.

In the event that the startup or standby transformer and one diesel-generator is operable, adequate power is available to operate the emergency safeguards equipment from either the operable transformer or the operable diesel generator. If both the startup and standby transformers are inoperable, either diesel-generator is sufficient to operate 100 percent of the required emergency loads.

Each of the two 125 volt station batteries has enough capacity to energize its vital buses and supply d-c power to the other emergency equipment for four hours without being recharged. Due to the high reliability of battery systems, one of the two batteries may be out of service for up to three days. This minimizes the probability of unwarranted shutdown by providing adequate time for reasonable repairs. A station battery is considered inoperable if more than one cell is out of service. A cell will be considered out of service if its float voltage is below 2.13 volts and the specific gravity is below 1.190 at 77°F.

Both +/- 24 volt station batteries must be operable during startup. However, in the RUN mode, one station battery may be out of service for the period

specified in Table 3.2-C, Table 3.2-D and Technical Specification 3.2.D.1. A station battery is considered inoperable if more than one cell is out of service. A cell is considered out of service if its float voltage is below 2.13 volts and its specific gravity is below 1.190 at 77°F.

The 250 volt d-c system provides power for the HPCI system. If the battery is taken out of service, the HPCI system would be inoperable and the requirements of Specification 3.5.D must be satisfied.

The battery room is ventilated to prevent accumulation of hydrogen gas exceeding 4 percent concentration. On loss of battery room ventilation, the use of portable ventilation equipment and daily sampling provides assurance that potentially hazardous quantities of hydrogen gas will not accumulate.

EVALUATION OF CHANGE WITH RESPECT TO 10 CFR 50.92

At the DAEC, in addition to the other battery systems, two independent +/-24-V buses are provided, each supplied by a center-tapped 48-V station battery and two 24-V battery chargers that are fed from essential AC buses. The battery chargers are sized to be capable of charging each station battery at the normal charging rate to full charge after a 4-hour emergency discharge and still feed the connected loads.

The two +/-24 volt station battery systems are divisionalized and redundant, with each having its own set of batteries, battery chargers, and a distribution panel. Separation is provided for all equipment and feeders as in all other safeguards systems.

The two +/-24-V dc buses supply the following two groups of equipment:

Group A

Rad Waste Effluent  
RHR & ESW  
Post Treatment "A"  
Vent Pipe "A"  
Linear Radiation  
Refuel Pool  
Reactor Bldg. Vent  
Trip Aux Unit "A"  
Start-up Range NMS  
Process Rad Monitor

Group B

Service Water Effluent  
Post Treatment "B"  
Vent Pipe "B"  
Refuel Pool  
Reactor Bldg. Vent  
Reactor Bldg. Closed Cooling  
Water System  
Trip Aux Unit "B"  
Start-up Range NMS  
Process Rad Monitor

As a result of the Reportable Occurrence described in LER 83-045, it is desirable to more clearly define the limiting condition for operation with respect to the +/-24 volt station battery systems. In order to accomplish this goal, the enclosed application has been prepared and is judged to involve no significant hazards based upon the following information:

- (1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response:

No. This Technical Specification change specifies the Limiting Condition for Operation (LCO) for the two redundant +/-24 volt station battery systems when the reactor is in the RUN mode. The LCO specified ensures that at least one +/-24 volt station battery system is operable in the RUN mode; otherwise, the requirements of Table 3.2-C, Table 3.2-D and Technical Specification 3.2.D.1 must be met for continued reactor operation. For any reactor restart, both +/-24 volt station battery systems must be fully operational. Therefore, the probability of occurrence or the magnitude of the consequences of an accident or malfunction of safety related equipment is not increased.

- (2) Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response:

No. This Technical Specification change details the Limiting Condition of Operation (LCO) for the two redundant +/- 24 volt station battery systems. Each station battery system supplies one set of the start-up range neutron monitors and process radiation monitors. A review of the Technical Specifications reveals that the most limiting conditions for operation with the loss of any channel of the neutron monitoring system or applicable radiation monitor is 7 days, provided that the inoperable monitor trip system is placed in the safe (tripped) condition (e.g., 3.2.D.1(b), 3.2.D.1(c), 3.5.G.1, 3.8.A.3. and 3.8.B.2.(a)). Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response:

No. This specification change does not involve any change in safety related equipment or mode of operation. The redundancy of the +/-24 volt station battery systems, in conjunction with the LCO conditions set forth in 3.2.D.1.(c) and 3.5.G.1 ensures the margin of safety for the DAEC, as defined in the bases of the Technical Specifications, has not been reduced.

In the April 6, 1983 Federal Register, the NRC published examples of amendments that are not likely to involve a significant hazards concern. Example number (ii) of that list states:

"A change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications: for example, a more stringent surveillance requirement."

With respect to the above evaluation, these LCOs more clearly specify the operational limitations of the DAEC with respect to the +/- 24 volt station battery systems; therefore, this application for amendment is not likely to involve a significant hazards concern.